

## Remarks

### I. Application Status

Claims 1-42 are pending in this application and stand rejected under 37 C.F.R. § 102 and/or § 103. Claim 1 is objected to. Claims 1, 23, 24, and 30 have been amended, and claims 6, 22 and 36-42 are canceled. Support for the “electrolessly depositing” is found throughout the specification and in particular at [0028] and [0029]. Support for “topographically substantially flat surface having an exposed conductive element disposed therein” is found throughout the specification and in particular at [0024] and Figs. 2A, 3A And 4A. No new matter is added with this amendment.

### II. Objection to the Claims

Claim 1 is amended to address the claim informality. The objection may be withdrawn.

### III. Rejection of the claims as anticipated by Farrar.

Claims 1-5, 8-22, 24, 26, 28 and 29 stand rejected under 37 CFR § 102(e) as being anticipated by US Patent No. 6, 426,289 (“Farrar”). The Office Action considers Farrar to teach all the features of the claimed invention. Applicants respectfully disagree.

Specifically, Applicants submit that Farrar fails to teach or suggest a “depositing a protective layer on a topographically substantially flat substrate surface comprising an exposed conductive element,” as is recited in claim 1 and similarly in claims 24 and 30. Note, for example, Figs. 1 and 7 of Farrar, which show a conductive element embedded within a substrate and Figs 2 and 8 of Farrar, which show a conductive element in a topographically varied surface.

Farrar also fails to teach or suggest that a “stray metallic passivating material is also deposited on the protective layer,” as recited in claim 1 and similarly in claims 24 and 30. Farrar clearly discloses plating layer applied over the entire exposed surfaces of the device, including on top of the third dielectric layer. See, for example, layer 11 in Fig. 3 and layer 23 in Fig. 9 of

The use of a blanket deposition layer requires different and less advantageous removal methods, e.g., CMP, for the blanket-deposited layer as compared to the stray deposited layer of claims 1, 24 and 30, which may be removed for example using etching and ashing techniques (see [0031]).

Thus, Farrar teaches a method of manufacturing a metallic barrier layer on the top surface of a metal feature that is not topographically flat with respect to the substrate by applying a plating layer over the entire exposed surfaces of the device. There is, however, no teaching of a “topographically flat substrate surface comprising an exposed conductive element,” or of “electrolessly depositing a metallic passivating layer onto the exposed conductive element, wherein stray metallic passivating material is also deposited on the protective layer,” as is recited in claim 1 (and similarly in claims 24 and 30).

For the forgoing reasons, claims 1, 24 and 30 are not anticipated by or obvious over Farrar. Claims 2-5, 7-22, 23, 25-29 and 31-35 depend from claims 1, 24 or 30 and also are not anticipated or obvious over Farrar for the same reasons. It is respectfully requested that the rejection be withdrawn.

IV. Rejection of the claims as obvious over by Farrar in view of secondary references.

Each of claims 6, 7, 23, 25, 27 and 34 stand rejected under 35 USC § 103(a) as being unpatentable over Farrar in view of one of the cited secondary references (i.e., US Patent No. 6,303,200 (“Jiang”), US Patent No. 3,839,067 (“Sosnowski”), US Patent No. 4,639,380 (“Amelio”), US Patent No. 5,656,128 (“Hashimoto”).

Claim 6 has been cancelled. With regard to remaining claims 7, 23, 25, 27 and 34, it is submitted that none of the combinations (as set forth in the office action by the Examiner) of Farrar with any cited secondary reference disclose all of the features that have been pointed out above as lacking in Farrar (i.e., none of the secondary references supply each of those features

mentioned above as lacking in Farrar). Consequently, these claims are not obvious over Farrar in view of the secondary references, as set forth by the Examiner. It is respectfully requested that the rejections be withdrawn.

V. Rejection of the claims as obvious in view of Farrar.

Claims 30-33 and 35 stand rejected under 35 USC § 103(a) as being unpatentable over Farrar. The Office Action considers that Farrar discloses all process limitations of the claimed invention and that it would have been obvious to incorporate a system comprising means for performing the process steps. See, Office Action dated February 24, 2005, at ¶11.

As noted above in Section III, Farrar teaches applying a plating layer over the entire exposed surfaces of the device. Farrar also teaches electroless deposition of a conductive element onto a plating layer. There is, however, no teaching or suggestion of “electrolessly depositing a metallic passivating layer onto the exposed conductive element, wherein stray metallic passivating material is also deposited on the protective layer,” as is recited in claim 30. Nor is there any teaching or suggestion of “a topographically substantially flat substrate surface comprising a conductive element disposed in a dielectric material flat substrate,” as recited in claim 30.

For the forgoing reasons, claim 30 is not unpatentable over Farrar. Claims 31-33 and 35 dependent on claim 30 and are also not unpatentable for the same reasons. It is respectfully requested that the rejection be withdrawn.

VI. Rejection of claims 36-42.

Claims 36-42 have been canceled, rendering the rejection moot.

VII. Miscellaneous

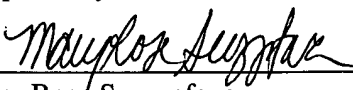
Applicants note the Examiner's request to identify specific references believed to have particular significance or materiality to the patentability of the pending claims. Applicants respectfully request that the examiner review the references provided in the Information Disclosure Statement in order to arrive at his own independent assessment of the relevance and/or materiality of the references.

Applicants submit that the amended claims, in light of the remarks provided, place claims 1-5, 7-22 and 24-35 are in condition for allowance. A favorable Notice to that effect is respectfully requested. Please charge any additional fees due in connection with this matter, or credit any overpayment to Deposit Account No. 08-0219.

If there are any questions, please call the undersigned at the telephone number indicated below.

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Respectfully submitted,

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